

III.—*Descriptions of new West-African Freshwater Fishes.* By G. A. BOULENGER, F.R.S.

Barbus Ansorgii.

Depth of body $3\frac{1}{2}$ to $3\frac{3}{4}$ times in total length, length of head 4 to $4\frac{1}{3}$ times. Snout rounded, slightly projecting beyond the mouth, slightly shorter than the eye, the diameter of which is $3\frac{1}{2}$ times in length of head; interorbital width 3 times in length of head, width of mouth $3\frac{2}{3}$ times; lips feebly developed; anterior barbel a little shorter, posterior a little longer than eye, the distance between them about half diameter of eye. Dorsal III 7, last simple ray very strong, bony, strongly serrated behind, a little longer than head; free edge of the fin feebly concave; its distance from the occiput a little less than its distance from the caudal fin. Anal III 5, longest ray about $\frac{2}{3}$ length of head. Pectoral a little shorter than head, nearly reaching ventral; latter entirely in front of vertical of origin of dorsal. Caudal peduncle $1\frac{2}{3}$ times as long as deep. Scales 28–29 $\frac{4\frac{1}{2}}{4\frac{1}{2}}$, $2\frac{1}{2}$ –3 between lateral line and ventral, 12 or 13 round caudal peduncle. Brownish above, silvery white beneath, with an ill-defined dark lateral band above the lateral line; fins uniform whitish.

Total length 70 mm.

Two specimens from the Luache River at Bange Ngola, Angola, collected by Dr. W. J. Ansorge.

The position of the ventrals in advance of the dorsal readily distinguishes this species from *B. Kessleri*, Stdr., originally described from Angola. The nearest ally of *B. Ansorgii* is *B. paludinosus*, Ptrs., from East Africa, which has shorter anterior barbels and more numerous scales.

Barbus Walkeri.

Depth of body 3 to $3\frac{1}{2}$ times in total length, length of head $3\frac{1}{2}$ to 4 times. Snout rounded, slightly projecting beyond the mouth, not longer than the eye; diameter of eye 4 times in length of head, interorbital width $2\frac{1}{3}$ to $2\frac{1}{2}$ times; width of mouth about $\frac{1}{3}$ length of head; lips moderately developed, interrupted on the chin; barbels two on each side, anterior $1\frac{1}{2}$ to $1\frac{2}{3}$, posterior 2 diameters of eye, the distance between them nearly equalling diameter of eye. Dorsal III 8, last simple ray flexible, not enlarged, $\frac{2}{3}$ to $\frac{3}{4}$ length of head; free edge of the fin straight; its distance from the occiput a little less than its distance from the caudal

fin. Anal III 5, longest ray $\frac{3}{5}$ to $\frac{2}{3}$ length of head. Pectoral about $\frac{2}{3}$ length of head, not reaching ventral; latter below anterior rays of dorsal. Caudal peduncle $1\frac{1}{2}$ to $1\frac{3}{4}$ times as long as deep. Scales 21-22 $\frac{3\frac{1}{2}}{4\frac{1}{2}}$, $2\frac{1}{2}$ -3 between lateral line and ventral, 12 round caudal peduncle. Brown on the back, yellowish on the sides and below, the lateral scales brown at the base; two longitudinal dark brown streaks embracing the 8 to 10 first scales of the lateral line; four round black spots on each side, the second higher up than the others, just in front of the vertical of the origin of the dorsal fin, the third below the second half of the dorsal fin and above the lateral line, the fourth at the base of the caudal fin and traversed by the lateral line; a more or less distinct dark spot on each side of the vent; fins white, a few small black spots on the dorsal.

Total length 100 mm.

Gold Coast. Several specimens from Ingogosu, collected by the late Mr. R. B. N. Walker. These have been confounded by Dr. Günther with *B. trispilus*, Blkr., which differs in the smaller scales and in the markings.

Puntius (Barbodes) camptacanthus, Sauvage (Bull. Soc. Zool. France, 1882, p. 322), nec Bleeker, is perhaps the same fish.

Amphilius atesuensis.

Depth of body 5 to 6 times in total length, length of head 4 to $4\frac{1}{2}$ times. Head a little longer than broad; eyes small, in the middle of the length of the head, $2\frac{1}{2}$ or 3 diameters apart; interocular width $\frac{3}{4}$ length of snout, which is broadly rounded and projects a little beyond lower jaw; posterior nostril a little nearer eye than end of snout, præmaxillary teeth forming a crescentic band; maxillary barbel as long as head or a little longer, outer mandibular a little shorter than head, inner mandibular about $\frac{3}{5}$ length of head. Dorsal I 5-6, equally distant from end of snout and from root of caudal, first ray $\frac{2}{3}$ to $\frac{3}{4}$ length of head. Adipose $\frac{1}{4}$ to $\frac{1}{2}$ longer than dorsal. Anal I 5-6, midway between root of ventral and root of caudal. Pectoral slightly longer than ventral, a little shorter than head. Ventrals below posterior rays of dorsal. Caudal forked, with rounded lobes. Caudal peduncle a little longer than deep. Brown above, speckled with darker, whitish below; six yellowish cross-bars on the back, the first on the nape, the third just behind the dorsal fin; fins whitish, the dorsal with a transverse series of small black spots, the

caudal with a black basal bar and a transverse band of crowded black spots.

Total length 60 mm.

Four specimens from the Atesu River, Gold Coast, from Mr. R. B. N. Walker's collection. These specimens have been recorded by Günther (P. Z. S. 1902, ii. p. 336) under the name of *Amphilius platycheir*, Gthr., a species which differs in the ventral fins being some way behind the vertical of the dorsal, which is much nearer the end of the snout than the root of the caudal, in the longer snout, and in the shorter barbels.

Chiloglanis cameronensis.

Body somewhat depressed in front, compressed behind, its depth $4\frac{1}{2}$ to 5 times in the total length. Head depressed, once and $\frac{1}{3}$ as long as broad, its length 3 times in the total length. Eye directed upwards, in second half of head, its diameter 7 or 8 times in length of head, once and $\frac{2}{3}$ in inter-orbital width, which equals or is a little less than the distance between eye and posterior nostril; præmaxillary teeth in two large oval groups, well separated on the middle line, forming 4 or 5 transverse series; a group of 12 to 14 slender mandibular teeth; maxillary barbel $\frac{1}{4}$ to $\frac{1}{3}$ length of head, longer than the lower labials. Dorsal I 5; spine not serrated, about $\frac{2}{3}$ length of head. Adipose low, its base about $\frac{2}{3}$ its distance from the rayed dorsal. Anal III 5-6. Pectoral spine not serrated, $\frac{2}{3}$ to $\frac{2}{3}$ length of head. Ventral extending to origin of anal or a little beyond. Caudal slightly emarginate. Caudal peduncle once and a half as long as deep. Pale brownish above; head marbled with dark olive and with a chevron-shaped dark band passing through the eyes, the point on the occiput; three broad dark cross-bands on the body, the first behind the dorsal, the second across the base of the adipose fin, the third at the base of the caudal; fins whitish, with a dark band across the caudal.

Total length 50 mm.

Seven specimens from Efulen, South Cameroon, collected by Mr. G. L. Bates.

This species is closely related to *C. modjensis*, Blgr., recently described from Southern Ethiopia, from which it is readily distinguished by the shorter caudal peduncle and the wider interspace between the two groups of præmaxillary teeth.

Chiloglanis Batesii.

Body somewhat depressed in front, compressed behind, its depth 5 to 6 times in the total length. Head depressed, once and $\frac{1}{3}$ as long as broad, its length 3 times in the total length. Eye directed upwards, in second half of head, its diameter 5 times in length of head and equal to interorbital width, which exceeds the distance between the eye and the posterior nostril; premaxillary teeth in two large oval groups, well separated on the middle line, forming 3 or 4 transverse series; a group of 8 to 12 slender mandibular teeth; maxillary barbel as long as eye, lower labial barbels shorter still. Dorsal I 5; spine not serrated, $\frac{2}{5}$ to $\frac{1}{2}$ length of head. Adipose low, its base barely $\frac{1}{2}$ its distance from the rayed dorsal. Anal III 5. Pectoral spine not serrated, about $\frac{1}{2}$ length of head. Ventral extending beyond origin of anal. Caudal deeply forked, upper lobe more or less produced. Caudal peduncle twice as long as deep. Yellowish brown above, with large dark brown marblings forming more or less regular cross-bands; a black bar at the base of the caudal; lower parts white; fins whitish, lobes of caudal greyish.

Total length 38 mm.

South Cameroon; four specimens from Efulen and one from streams tributary of the Lobi River, 15 or 20 miles S.W. of Efulen. Collected by Mr. G. L. Bates.

Very closely allied to *C. brevibarbis*, Blgr., discovered by Mr. S. L. Hinds in the Kenya district of East Africa; differing in the slightly larger eye, the more numerous mandibular teeth, and the longer ventral fin.

Haplochilus macrurus.

Depth of body equal to length of head, $3\frac{1}{2}$ to 4 times in total length. Upper surface of head flat; snout much shorter than the eye, the diameter of which is about 3 times in length of head; lower jaw projecting beyond upper; interorbital space $\frac{2}{5}$ to $\frac{1}{2}$ length of head. Dorsal 7-8, rounded, originating nearer to root of caudal than to occiput; longest rays $\frac{3}{5}$ to $\frac{3}{4}$ length of head. Anal 12-14, originating at equal distance from eye and from root of caudal; longest rays as long as head. Pectoral nearly $\frac{3}{4}$ length of head, reaching beyond base of ventral. Caudal fin rounded, longer than head. Caudal peduncle a little longer than deep. 24 to 26 scales in a longitudinal series, 6 or 7 in a transverse series. Pale brownish, finely speckled with darker; a fine dark lateral

line; fins uniform greyish; sometimes a dark spot in the axil and another at the base of the ventral fin.

Total length 32 mm.

Several specimens from Marimba, Lake Sarmento, Angola, collected by Dr. W. J. Ansorge.

This species is allied to *H. spilanchen*, A. Dum., but easily distinguished by the shorter snout, the projecting lower jaw, and the larger caudal fin. Secondary sexual characters do not appear to exist.

PROCATOPUS, gen. nov. (Cyprinodontid).

Characters of *Haplochilus*, McClell., but ventral fins far forward, almost below the base of the pectorals, which are inserted very high up the sides.

Procatopus nototenia.

Body very strongly compressed, its depth equal to length of head and 3 times in total length; upper surface of head and anterior part of back quite flat. Snout as long as eye, the diameter of which is 3 to $3\frac{1}{2}$ times in length of head; lower jaw projecting beyond upper; interorbital width not quite half length of head; sensory canals on upper surface of head very strongly developed. Dorsal 9-11, originating at equal distance from occiput and from root of caudal and above middle of base of anal; posterior ray longest, $\frac{2}{3}$ to $\frac{4}{5}$ length of head. Anal 14-17, longest rays, in third fourth, as long as head or a little shorter. Pectoral about $\frac{3}{4}$ length of head. Ventral of 6 rays, outer produced into a filament, and at least as long as head. Caudal fin truncate, as long as head. Caudal peduncle as long as deep. 25-28 scales in a longitudinal series, 7 or 8 in a transverse series; no lateral line; exposed surface of scales regularly hexagonal, more than twice as deep as long on the middle lateral series. Pale yellowish olive above, yellowish white beneath; a bright yellow streak on each side of the back, from behind the supraciliary edge to the base of the caudal fin, bordering the dorsal fin; an orange streak on the middle of the back, from the occiput to the origin of the dorsal fin; fins greyish, anal and caudal tinged with yellow at the base.

Total length 48 mm.

Southern Cameroon. Numerous specimens were obtained by Mr. G. L. Bates 15 or 20 miles S.W. of Efulen, in streams tributary of the Lobi River, which reaches the sea at Batanga.